

IN THE CLAIMS

For the convenience of the Examiner, all pending claims of the Application are reproduced below.

1. **(Currently Amended)** A method for self-regulating quality of service in a communications network, comprising:

measuring ~~the~~ an amount of jitter of a first media stream received in a first router;

comparing the amount of jitter of the first media stream received in the first router to the amount of jitter of at least one other media stream received in the first router; **and**

receiving at the first router a measurement of the amount of jitter associated with the first media stream at a second router; and

prioritizing ~~the~~ timing of ~~the~~ a transmission of a packet of the first media stream from the first router toward the second router based at least in part on ~~the~~ results of the comparing step and at least in part on the amount of jitter associated with the first media stream at the second router.

2. **(Original)** The method of Claim 1, wherein the packet is a voice packet.

3. **(Original)** The method of Claim 1, further comprising storing the measurement of jitter of the first media stream and the at least one other media stream.

4. **(Currently Amended)** The method of ~~Claim 1~~ Claim 1, wherein the step of prioritizing includes optimizing quality of service.

5. **(Original)** The method of Claim 1, wherein the step of prioritizing includes timing the transmission of the packet from the first media stream before the transmission of a packet from the at least one other media stream when the first media stream has a greater amount of jitter than the at least one other media stream.

6. **(Canceled)**

7. **(Canceled)**

8. **(Currently Amended)** The method of ~~Claim 1~~ Claim 1, wherein the first media stream has traversed through a plurality of routers, wherein the step of measuring comprises determining ~~the~~ a number of routers through which the packet has traversed and wherein the number of routers represents the amount of jitter.

9. **(Currently Amended)** A method for self-regulating quality of service in a communications network having a communication path between at least a first router and a third router via a second router, comprising:

receiving a measurement of ~~the~~ an amount of jitter associated with a media stream at at least the third router; and

prioritizing ~~the~~ timing of ~~the~~ a transmission of a packet in the media stream from at least the first router toward at least the third router via the second router based at least in part on the amount of jitter associated with the media stream at the third router.

10. **(Currently Amended)** The method according to ~~Claim-9~~ Claim 9, wherein the amount of jitter associated with the media stream at the third router is communicated to the first router.

11. **(Original)** The method according to Claim 9, wherein the third router prioritizes the timing of the transmission of the packet from the first router.

12. **(Currently Amended)** The method according to ~~Claim-9~~ Claim 9, further comprising:

measuring the amount of jitter associated with the media stream at the third router; and

communicating the amount of jitter measured at the third router to the first router.

13. **(Currently Amended)** The method according to ~~Claim-9~~ Claim 9, wherein the receiving and prioritizing occur at a central server.

14. **(Currently Amended)** The method of ~~Claim-9~~ Claim 9, wherein the media stream has traversed through a plurality of routers, wherein the measurement of the amount of jitter comprises ~~the~~ a determination of ~~the~~ a number of routers through which the packet has traversed and wherein the number of routers represents the amount of jitter.

15. **(Currently Amended)** A method for self-regulating quality of service in a communications network, comprising:

measuring ~~the~~ an amount of jitter of a first media stream received in a first router;

comparing the amount of jitter of the first media stream received in the first router to the amount of jitter of at least one other media stream received in the first router;

receiving at the first router a measurement of the amount of jitter associated with the first media stream at a third router;

prioritizing ~~the~~ timing of ~~the~~ a transmission of a voice packet in the first media stream from the first router via a second router toward the third router based at least in part on ~~the~~ results of the comparing step the amount of jitter of the first media stream to the amount of jitter of at least one other media stream and at least in part on the amount of jitter associated with the first media stream at the third router; and

storing the measurement of jitter of the first media stream and the at least one other voice media stream.

16. **(Currently Amended)** The method according to Claim 15, further comprising measuring the amount of jitter associated with the first media stream at the third router that is to receive the voice packet.

17. **(Currently Amended)** The method of ~~Claim 15~~ Claim 15, wherein the step of prioritizing includes optimizing quality of service.

18. **(Original)** The method of Claim 15, wherein the step of prioritizing includes timing the transmission of the voice packet before the transmission of a voice packet in the at least one other media stream when the first media stream has a greater amount of jitter than the at least one other media stream.

19. **(Currently Amended)** The method of ~~Claim 15~~ Claim 15, wherein the first media stream has traversed through a plurality of routers, wherein the step of measuring comprises determining ~~the~~ a number of routers through which the packet has traversed and wherein the number of routers represents the amount of jitter.

20. **(Currently Amended)** A system for self-regulating quality of service in a communications network, comprising:

means for measuring ~~the~~ an amount of jitter of a first media stream received in a first router;

means for comparing the amount of jitter of the first media stream received in the first router to the amount of jitter of at least one other media stream received in the first router; **and**

means for receiving at the first router a measurement of the amount of jitter associated with the first media stream at a second router; and

means for prioritizing ~~the~~ timing of ~~the~~ a transmission of a packet in the first media stream from the first router toward the second router based at least in part on ~~the~~ results of the comparing step and at least in part on the amount of jitter associated with the first media stream at the second router.

21. (Currently Amended) ~~Logic-encoded-in-media~~ A computer readable medium including logic for self-regulating quality of service in a communications network, ~~comprising~~ the logic operable to ~~at least~~:

measure ~~the~~ an amount of jitter of a first media stream received in a first router;

compare the amount of jitter of the first media stream received in the first router to the amount of jitter of at least one other media stream received in the first router; ~~and~~

receive at the first router a measurement of the amount of jitter associated with the first media stream at a second router; and

prioritize ~~the~~ timing of ~~the~~ a transmission of a packet in the first media stream from the first router toward the second router based at least in part on ~~the~~ results of the comparing step and at least in part on the amount of jitter associated with the first media stream at the second router.

22. **(Currently Amended)** A system for self-regulating quality of service in a communications network having a communications path between at least a first router and a third router via a second router, comprising:

means for receiving a measurement of ~~the~~ an amount of jitter associated with a media stream at the third router; and

means for prioritizing ~~the~~ timing of ~~the~~ a transmission of a packet in the media stream from the first router via the second router toward the third router based at least in part on the amount of jitter associated with the media stream measured at the third router.

23. **(Currently Amended)** ~~Logic encoded in media~~ A computer readable medium including logic for self-regulating quality of service in a communications network having a communications path between at least a first router and a third router via a second router, ~~comprising~~ the logic operable to ~~at least~~:

receive a measurement of ~~the~~ an amount of jitter associated with a media stream at a third router; and

prioritize ~~the~~ timing of ~~the~~ a transmission of a packet in the media stream from a first router via a second router toward the third router based at least in part on the amount of jitter associated with the media stream measured at the third router.

24. **(New)** A method for self-regulating quality of service in a communications network, comprising:

receiving a first measurement of an amount of jitter of a media stream at a first router;

receiving a second measurement of an amount of jitter of the media stream at a second router;

associating, at a central server, the first measurement with the second measurement as jitter of the media stream at the first router and the second router, respectively; and

establishing a priority of transmission of a packet of the media stream from the first router toward the second router at the central server, using the first measurement with the second measurement.

25. **(New)** The method of Claim 24, further comprising communicating the priority to the first router.